

**FINDING OF NO SIGNIFICANT IMPACT  
FOR  
TOWN OF MANHATTAN WATER SYSTEM IMPROVEMENTS**

**TO: ALL INTERESTED PERSONS**

Date: December 5, 2008  
Action: Funding Water Meter Installation  
Location of Project: Manhattan, Montana  
DEQ Funding: \$350,734.  
Total Project Cost: \$1,022,699.

An environmental review has been conducted by the Montana Department of Environmental Quality (DEQ) for proposed funding for improvements to the Town of Manhattan Water System. The proposed project involves water meter installation on all services. The purpose of the project is to allow Manhattan to assess water charges equitably. Future water system projects will be financed with grant funds that require metering and loans that will be repaid from water system revenues.

The affected environment will primarily be the area of Manhattan, Montana and the immediate vicinity. The human environment affected will include residents and visitors of Manhattan. Based on the environmental assessment, the project will not have significant adverse impacts upon terrestrial and aquatic life or habitat, including endangered species, water quality or quantity, air quality, geological features, cultural or historical features, or social quality.

This project will be funded in part with low interest loans through the Montana Drinking Water State Revolving Fund Program, administered by the Montana Department of Environmental Quality and the Montana Department of Natural Resources and Conservation.

The DEQ utilized the following references in completing its environmental review of this project: Preliminary Engineering Report For the Town of Manhattan, May 15, 2006; Water System Analysis Update for the Town of Manhattan, January 2007; Addendum to the May 15, 2006 Preliminary Engineering Report, October 2007; Specifications and Bid Documents for Provision of Water Meters, October 2008; Specifications and Bid Documents for Installation of Water Meters and Associated Fittings, October 2008; all prepared for the Town of Manhattan by Thomas, Dean and Hoskins Inc, Engineering Consultants, Bozeman, Montana; A Uniform Application Form for Montana Public Facility Projects for the Town of Manhattan, April 20, 2006. Town of Manhattan Regular Meeting Minutes and Public Hearing, September 9, 2008.

References are available for review upon request by contacting:

Marc Golz  
Department of Environmental Quality  
P.O. Box 200901  
Helena, MT 59620-0901  
Phone (406) 444-6770  
Email: mgolz@mt.gov

Or

David Crawford  
Town of Manhattan  
215 W. Mendenhall, Suite C-1  
Bozeman, MT 59715  
Email: david.crawford@tdhbozeman.com

Comments on this finding or on the EA may be submitted to DEQ at the above address. Comments must be postmarked no later than 30 days after the date of publication of this FONSI in the newspaper. After evaluating substantive comments received, DEQ will revise the EA or determine if an EIS is necessary. Otherwise, this finding of no significant impact will stand if no substantive comments are received during the comment period or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant.

Signed,

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Todd Teegarden, Chief  
Technical & Financial Assistance Bureau

c: file

TOWN OF MANHATTAN WATER METERS PROJECT  
ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant: Town of Manhattan  
Address: P.O. Box 96  
Manhattan, MT 59741  
Project Number: DWSRF not assigned yet

B. CONTACT PERSON

Name: Dave Crawford, City Engineer  
Address: Town of Manhattan  
215 West Mendenhall, Suite C-1  
Bozeman, MT 59715  
Telephone: (406) 586-0277

C. ABSTRACT

The Water System Preliminary Engineering Report (PER) for the Town of Manhattan (May 2006) examined the entire water system and many alternatives for improvements. The PER recommended adding 500,000 gallons or more of storage, construction of new water mains, and the installation of water meters. This environmental assessment addresses only the installation of water meters. Water meters will allow the Town of Manhattan to better quantify water use and will almost certainly reduce water consumption.

The approximate cost of the water meter project is \$1,022,699, of which \$350,734 will be borrowed by the Town of Manhattan from the Drinking Water State Revolving Fund (DWSRF) loan program. \$511,350 will come from the Treasure State Endowment Grant Program, \$115,000 from DNRC grants and the Town will provide \$45,616.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species and historical sites will not be adversely impacted as a result of the proposed project. Additional environmental impacts related to land use, water quality, air quality, public health, energy, noise, and growth were also assessed. No significant long-term impacts will occur.

The project will be constructed using standard construction methods and to minimize or eliminate pollutants during construction, best management practices will be implemented. No permits other than plan and specification review and approval are required from the State Revolving Fund (SRF) section of the DEQ for this project.

The DEQ, Technical & Financial Assistance Bureau, has prepared this Environmental Assessment (EA) to satisfy the requirements of the National Environmental Policy Act (NEPA) and the Montana Environmental Policy Act (MEPA).

D. COMMENT PERIOD

Thirty (30) calendar days

II. PURPOSE OF AND NEED FOR ACTION

A. WATER FACILITIES

The addition of water meters will encourage water conservation in the Town of Manhattan and allow the town to better understand its water use characteristics. This project is one step of several identified to improve the overall water system. Water meters will also allow the town to identify leaks in the water mains and to prioritize areas needing maintenance which will contribute to a sound distribution system. A sound distribution system is important for public health and safety.

Approximately \$6.8 million of improvements to the water system have been identified as needed in the next 5 years. This environmental assessment covers only the first phase, \$1.023 million, of improvements. The other phases will be implemented in the future as they become necessary and as the budget allows.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION AND COSTS

A. ALTERNATIVES

The Town of Manhattan considered six recommendations/alternatives to improve the water system. They included: a metering system, elevated storage, at-grade storage, additional wells and pumps, sand point wells, and leak detection.

Three options were considered for utilization of water meters; 1) no action, 2) install meters, or 3) install meters with backflow prevention devices. Further consideration was given to installing meters, and installing meters with backflow prevention devices. Installation of water meters with backflow prevention devices was recommended in the PER.

B. SELECTED ALTERNATIVE

The first project to be completed will be the metering system. The reason this project is selected is to allow Manhattan to assess water charges equitably as the other projects will be financed and paid for with both grant funds that require metering and loans that will be repaid from water revenues.

C. COST

The existing monthly water service rate is \$28.08. With metering, the rate will change to a base rate of \$25.60 for up to 3,000 gallons plus \$1.25 for each additional 1,000

gallons used. The monthly median household income (mMHI) from the 2000 census is \$3,186. The base rate as a percentage of mMHI is 0.8%.

#### IV. AFFECTED ENVIRONMENT

##### A. STUDY AREA

The Town of Manhattan is located in South Central Montana along the Gallatin River. The location of Manhattan can be seen on the enclosed map in Figure 1.

Water meters will be installed throughout the Town of Manhattan. Residents will be impacted by having water meters installed in or on their homes or on their property in meter pits. The primary impact will be interrupted water service and inconvenience to residents during installation. Some residents will resent having to pay for water by volume used as opposed to a simple monthly fee. This usually results in water conservation as people become more aware of how much water they use. Construction is scheduled to begin in early 2009 and will continue for approximately 6 months. Individual residences, however, will only be impacted for a matter of hours in almost all cases. There may be a few cases where a residence would require more time to complete the work, but there are provisions to assure that no residence is without water for more than four hours.



FIGURE 1  
LOCATION MAP

B. POPULATION AND FLOW PROJECTIONS

The population of Manhattan is approximately 1400 people. Water meters will be placed on all services, so the project will affect the whole population of Manhattan. No growth will result from this project. Water use will almost certainly decline as a result of water meter installation.

The Standards for Water Works of MDEQ Circular DEQ 1 will be required to be met for water meter project. The water meters will meet the requirements of American Water Works Association (AWWA) standards. If temporary supply of water is utilized it must meet the DEQ 1 Standards for temporary water supply including disinfection, backflow prevention and microbiological testing.

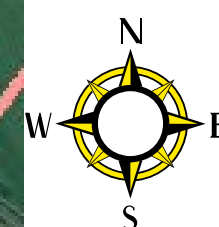
C. NATURAL FEATURES

The Town of Manhattan lies in the intermountain valley of the Gallatin River. The topography is relatively flat, soils are suitable and utilized for farming in the vicinity. Manhattan is a small town with little commercial activity. Groundwater is plentiful and the Gallatin River flows nearby.

The Town of Manhattan is served by 5 sources of supply including a spring and four wells. Two of the wells are currently pursuing water rights. A fifth well has also been drilled and it is also involved in the water rights process.

D. MAPS

Figure 1 shows the general location of the Town of Manhattan within the state of Montana. Figure 2 shows the Town of Manhattan.





## V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

### A. DIRECT AND INDIRECT IMPACTS OF PROPOSED PROJECT

No adverse impacts to the environment are anticipated by implementation of the proposed main replacements. All of the system improvements will be located within the existing town.

Land Use-The land use in the study area is residential and commercial. No adverse affects to any of these uses is expected.

#### Soils Suitability, Topographic and Geologic Constraints

No topographical or geological constraints are present for the proposed water project. Based on the existing conditions and soils types, and except as noted above for contaminated soils, the impacts of the proposed water project will have no significant effect on the soils or topography.

Fish and Wildlife and Biological Resources - The installation of water meters will not impact any fish, wildlife or biological resources.

Water Resource Issues - No significant adverse impacts to surface or groundwater will result from the proposed project. The installation of water meters should have a positive impact on water resources by reducing water use in Manhattan.

Floodplains and Wetlands – No adverse impacts to the floodplain will occur. The installation of water meters will have no impact on wetlands.

Cultural Resources & Historical Sites – The installation of water meters should have no adverse impact on historical properties.

Socio-Economic Issues - The population served by this water system will be impacted during the installation of water meters. The impacts during installation will include short term interruption in water service and inconvenience while the contractor accesses private and public property. In addition the way that customers pay for their water will now be in accordance with the volume of water they use as opposed to the existing system where water is paid for by a simple monthly fee that does not directly measure the water used. Customers may end up paying more for water, especially at first, as they adjust their water use to the new system. Some may consider this to be an adverse impact. However, water metering provides data that should allow a more fair distribution of charges for water use. Therefore, this is not a significant adverse impact.

Air Quality – The installation of water meters will have no impact on air quality.

Energy - During manufacturing and installation of the water meters, additional energy will be consumed, resulting in a direct short-term increased demand on this resource. The project will almost certainly result in decreased water demand in the long term which will decrease the amount of energy used in pumping water.

Public Health – Public health protection will be improved due to improvements in the ability to account for water use, quantify leaks and find and repair leaks in the water distribution system.

Noise - Short-term impacts from low level noise may occur during water meter installation. The construction period will be limited to normal daylight hours to avoid early morning or late evening construction related disturbances. In the long-term, no increase in noise levels associated with this project will occur.

Growth - No significant growth is forecast as a result of water meter installation.

## B. UNAVOIDABLE ADVERSE IMPACTS

Temporary inconvenience to residents and commercial establishments will occur as access to and from buildings during installation of water meters is accomplished. Some people will object to paying for the volume of water they use. Short-term water outages will be necessary and temporary above ground water supply may be necessary during installation of water meters. DEQ 1 design standards require that the specifications cover temporary supply of water to residents in a safe and sanitary manner. Energy consumption during construction cannot be avoided.

## C. CUMULATIVE IMPACTS

This project addresses existing water system needs and will have no significant negative cumulative effects on resources, ecosystems or human communities. There is no projected growth due to this project.

## VI. AGENCY ACTION, APPLICABLE REGULATIONS, AND PERMITTING AUTHORITIES

All water system improvements will be designed to meet Montana DEQ requirements. Proper State regulatory review and approval of the project plans and specifications will be provided. The owner, contractor and engineer are responsible for any applicable local, federal and state permits that may be required.

Appropriate contacts for easements and access will be addressed by the contractor with regards to the water meter installation.

## VII. PUBLIC PARTICIPATION

A public hearing regarding this project was held September 9, 2008. Discussion at the hearing focused on Town Resolution 08-008 regarding purchasing and installing water meters and securing public financing for the project. Some comments were in opposition to the project and some were in favor, most of the discussion centered on the issue of watering of lawns and how metering would affect that.

## VIII. REFERENCE DOCUMENTS

The following documents have been utilized in the environmental review of this project and are considered to be part of the project file:

1. Preliminary Engineering Report For the Town of Manhattan, May 15, 2006, prepared for the Town of Manhattan by Thomas, Dean and Hoskins Inc, Engineering

- Consultants, Bozeman, Montana.
2. Water System Analysis Update for the Town of Manhattan, January 2007, prepared for the Town of Manhattan by Thomas, Dean and Hoskins Inc, Engineering Consultants, Bozeman, Montana.
  3. Addendum to the May 15, 2006 Preliminary Engineering Report, October 2007, prepared for the Town of Manhattan by Thomas, Dean and Hoskins Inc, Engineering Consultants, Bozeman, Montana.
  4. Uniform Application Form for Montana Public Facility Projects for the Town of Manhattan, April 20, 2006.
  5. Specifications and Bid Documents for Provision of Water Meters, October 2008, prepared for the Town of Manhattan by Thomas, Dean and Hoskins Inc, Engineering Consultants, Bozeman, Montana.
  6. Specifications and Bid Documents for Installation of Water Meters and Associated Fittings, October 2008, prepared for the Town of Manhattan by Thomas, Dean and Hoskins Inc, Engineering Consultants, Bozeman, Montana.
  7. Town of Manhattan Regular Meeting Minutes and Public Hearing, September 9, 2008

**Recommendation for Further Environmental Analysis:**

☐ EIS    ☐ More Detailed EA    ☒ No Further Analysis

Rationale for Recommendation: Through the Preliminary Engineering Report (PER), prepared by Thomas, Dean and Hoskins and the other reference documents listed above in Section VIII and comments from the public process involved, no significant adverse impacts will occur from the proposed action; therefore an environmental impact statement is not required. The environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607, 17.4.608, 17.4.609 and 17.4.610. This EA is the appropriate level of analysis because there will be no significant adverse impacts. A Finding of No Significant Impact (FONSI) will be issued and legally advertised in the local newspaper and distributed to a list of interested entities. The period for comments to be received and considered regarding the project will be a minimum of 30 days before final approval is granted.

**EA Prepared By:**

\_\_\_\_\_  
Marc Golz, P.E.

\_\_\_\_\_  
Date

**Approved By:**

\_\_\_\_\_  
Mark Smith, P.E.

\_\_\_\_\_  
Date